IN THE CLAIMS:

A listing of the claims, as amended herein, is provided below:

1. (Amended) A numerically controlled reciprocating submersible pump apparatus, comprising a sieve tube, a drive and a pump, the whole apparatus capable of being placed in an underground oil reservoir; wherein the drive consists of a stator having an upper end and a lower end and a reciprocating head with iron cores inside the stator; the stator and the reciprocating head form a friction couple via supporting guides and the reciprocating head iron cores; characterized in that, with an airtight cavity, the upper end of the stator is connected to a lower end of the pump through the sieve tube; the pump is connected to an oil tube; the stator's lower end is connected to a balancing sieve tube, an end plug and an end coupler of the drive serially, and wherein there are many circular iron core winding groups comprising circular iron cores and circular windings inside a stator frame with the supporting guides between the winding groups; the circular iron cores and the circular windings are arranged next to each other, there are seal bushings on circular inside surfaces of the circular iron cores and circular windings; the seal bushings are connected to endcovers; and all these form the airtight cavity, and

wherein the supporting guides are circular, made from alloy and have circular inside surfaces made from alloy; the supporting guides have smaller inside diameters than the seal bushings.

2-4. (Canceled).

5. (Previously Presented) The numerically controlled reciprocating submersible pump apparatus, according to claim 1, characterized in that the reciprocating head's iron cores are circular and around a solid shaft of the reciprocating head with permanent magnets between the circular iron cores; and the circular iron cores' outside surfaces are made from alloy and form

a friction couple with the supporting guides via alloy layers on inside surfaces of the supporting guides.

6. (Previously Presented) The numerically controlled reciprocating submersible pump apparatus, according to claim 5, characterized in that the permanent magnets are equally spaced between the reciprocating head's circular iron cores; and the magnets have smaller outside diameters than the circular iron cores.

7. (Previously Presented) The numerically controlled reciprocating submersible pump apparatus, according to claim 1, characterized in that there is a pump housing outside a pump cylinder of the pump, forming a circular space between them for sand residue; and a plunger push rod of the pump is connected to an upper end of a solid shaft of the reciprocating head of the drive through the sieve tube.

8. (Previously Presented) The numerically controlled reciprocating submersible pump apparatus, according to claim 1, characterized in that the oil tube leads to ground surface; and the stator is connected to power terminals of an overground numerical control unit.